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Before The

Federal Communications Commission

Washington, DC

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of	)	MM Docket No. 99-25
Creation of a Low Power Radio Service	)	RM-9208
	)	RM-9242

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TO: The Commission

Comments of Hall Communications, Inc. on a new Low Power Radio Service

Hall Communications, Inc. (Hall) hereby submits comments on the above referenced Notice of Proposed Rule Making and Order adopted January 28, 1999 and released February 3, 1999. Hall is a family owned corporation, principally owned by Bonnie Hall Rowbotham, and is a licensee of 16 radio stations in Massachusetts, Connecticut, Vermont, New York, Pennsylvania, and Florida.

INTRODUCTION

Hall hereby files comments on the above referenced Notice. Hall is against the creation of a new Low Power Radio Service. The FCC has divided the LPFM proposal into two areas. It would create two new classes of FM radio stations, LP1000 watt and LP100 watt stations. The Commission further wants comments on opening up additional classes of FM radio stations of 1 to 10 watt stations.

The creation of thousands of new FM stations will destroy the integrity of the FM broadcast band. The ultimate number of stations that would be created is unknown. In order to create room for these new FM stations, the Commission proposes to eliminate some of the RF protection limits which have to this date insured reliable FM broadcast service to the public.

NEED FOR SERVICE

The Commission has not demonstrated the need for the new service. The Commission plan as proposed is reasoned entirely on the need for additional "outlets of public expression" for minorities, churches, community organizations and others. The Commission's plan however, provides no procedure to insure that those groups would be the final licensees of these new classes of stations.

The Commission in its comments has completely ignored other existing outlets for such voices. Community access television channels mandated on cable television systems provides such an outlet for those community views. A random look at the usage of community access channels in some of the markets Hall serves, shows they are vastly underutilized. If the need for additional public expression is so great, why has that outlet of expression been for the most part ignored by the same groups requesting space be allocated for them in the FM band?

The Commission does not have to create any new AM stations as well as the Low Power FM stations to accomplish its goal. Making it financially beneficial for existing owners in all size markets to divest some of their AM or FM stations to minority and non-profit organizations can do much to increase the market

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diversity and more efficiently use present allocations, especially in larger markets. This would add no additional congestion to the RF spectrum

There is no assurance that groups mentioned will be the ultimate licensees of these newly created stations, There is no assurance that the new FM stations created will not be hoarded by speculators, both former and current pirate radio operators who boldly violated existing Federal laws, or by hobbyists to be used more as a toy and not as a serious tool to provide a service to the public. That would do nothing to increase the diversity of voices in the community.

INCREASED INTERFERENCE

The proposal will exacerbate existing interference problems. Computer modeling and what the Commission "feels" does not necessarily present real world examples of coverage. Computer modeling programs can only "predict" coverage and interference. Such studies do not take into account real world conditions such as weather related effects or storms affecting station coverage and listenability, man made interference destroying band coverage from objects like computers, different RF devices, signs, other electrical equipment causing electrical interference. Thermal inversions, (sometimes know as tunneling or ducting,) are weather related incidents whereby levels of warm air are trapped in between layers of cooler air. The condition is more severe as dew points at ground level near the air temperature and humidity conditions reach the point of fog forming. Approaching weather fronts can contribute to the problem. Modeling does not take into account weather related problems like these thermal inversions, which affect many parts of the country. In particular, the southern half of the country and coastal areas are very prone to thermal inversions. Under these weather conditions, which can affect stations on and off for months, signals from stations follow weather fronts and thermal layers of the atmosphere and cause interference hundreds of miles away from the source. Adding more stations across the country will only increase the interference received, even if the current protection contours used by the Commission remain in effect.

Hall routinely experiences actual interference in Florida from other FM broadcast stations hundreds of miles away. WWRZ (FM) licensed to Fort Meade, Florida, a full class C2 station which has a city grade contour of about 20.4 miles from the tower, routinely receives interference in its city grade coverage area from co-channel and adjacent channel stations during the thermal inversion weather conditions. WWRZ (FM) routinely receives severe interference in its city-grade contour from a co-channel station in Miami, Florida, WRTO (FM) which is a non-maximized Class C station having a city grade contour of about 36 miles from its tower. The two tower sites are 166 miles apart. The city grade contours are separated by almost 110 miles. Yet under thermal inversion conditions, the signal from WRTO (FM) can make WWRZ (FM) unlistenable in its own city coverage area, often as close as 8 miles from the WWRZ (FM) tower. Interference is also received from stations in other cities in Florida and even from radio stations in Georgia, both co-channel and adjacent channels.

WCTK (FM), owned by Hall is a full class B facility, licensed to New Bedford, Massachusetts, has a city grade contour of about 20 miles. It often receives thermal inversion related interference from WOGL (FM), another Class B facility in Philadelphia, Pennsylvania, with an identical 20 mile city grade contour. WOGL (FM) also receives the same type of interference from WCTK (FM) during these inversion periods. The tower sites are 251 miles apart. The city grade contours are over 210 miles apart, yet they can still interfere with each other under real-world conditions.

The current spacing between any two Class B stations is either 150 miles for a co-channel station or 105 miles for an adjacent channel station, (73.207). In Lancaster, Pennsylvania, Hall owns WROZ (FM). Due to a "grandfathered" channel spacing, WROZ (FM) is short spaced and "boxed in" by four other stations.

WROZ (FM) to WGGY (FM)	106 miles	Current Rules = 150 miles
WROZ (FM) to WAYZ (FM)	56 miles	Current Rules = 105 miles
WROZ (FM) to WWDC (FM)	75 miles	Current Rules = 105 miles
WROZ (FM) to WBEB (FM)	73 miles	Current Rules = 105 miles

WROZ (FM) has to accept any interference from the above referenced stations, and they in turn must accept any interference from WROZ (FM). None of the stations are afforded full spacing protection

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according to current FCC rules. Adding additional new stations among these will further congest the short spaced condition and harm all of the stations involved. This is just one example of the myriad of short spacings that exist the country already.

Reducing protection contours and creating thousands of new FM broadcast stations can do nothing but exacerbate these interference levels that already exist. The airwaves are a finite resource. If a community has a shortage of housing, they do not eliminate property line setbacks and allow someone to build a new smaller house between you and your next door neighbor. They accept that there are reasonable limits to housing density. The Commission needs to accept there are reasonable limits to the density of usage of the RF spectrum.

PROTECTIONS

The airwaves are already overly congested. The FCC has proposed reducing the protection provided to existing stations in order to fit new LPFM stations into the RF spectrum. Many parts of the country are extremely congested with regard to the available broadcast spectrum. No new FM commercial stations are possible in most areas of the country due to the proper spectrum management utilized thus far by the Commission's Rules and Regulations. The protection contours between current allocations has been the keystone of the efficient use of the radio spectrum. These protections were designed to insure that the public has a reasonable assurance of reliable FM broadcast service.

The Commission though, in order to create new classes of stations, is willing to throw those time tested protection contours away and destroy the integrity of the FM broadcast spectrum in order to forward its own agenda.

DIGITAL RADIO

Digital radio is still in the development stage. Studies and research continue on the possible digital broadcast systems that the FM broadcast service could ultimately adopt. Field testing is underway and will continue on these proposed systems. However, until the final results of the digital radio studies are known, and the final technical standards are fully adopted, and any challenges of those standards are settled, adding additional FM broadcast allocations and changing existing protections, which some of those studies are based on, will cause permanent damage to the integrity of the FM band. At this point in time, no one, including the Commission really knows whether eliminating protection contours will affect the future of digital broadcasting.

TOWER SITING

The Commission has ignored the problem of locating tower sites. The Commission proposes LP1000 watt stations utilizing a 197' high tower. The recent proliferation of cellular towers has made many communities, environmental groups, and governing bodies sensitive to the construction of new towers. Zoning changes have made the location and construction of any tower very difficult if not impossible. Recent legislation in Vermont (Act 250) has prescribed a lengthy and ultimately expensive process to allow construction of any new tower in the state, with their unwritten goal being to deny any new tower construction. The legislation even tried to prescribe the same process just to replace an existing tower that either needed to be replaced by routine maintenance or had it been damaged in any way requiring replacement. The town of Salem, Connecticut has banned all towers, period. The Commission has made no comments in the proposed rulemaking on providing any relief to anyone attempting to construct a new station and tower site. The groups the commission is hoping to benefit from this new service will have the most difficult time financing and staying with the process necessary to obtain tower site zoning.

Tower sites are never allowed in residential areas, or anywhere near population centers. Agricultural or Industrial zoned areas are usually the only areas where tower construction is considered. Due to the smaller service areas for these new stations, one can easily question whether the new Low Power operators can

even find adequate new tower sites that still insure the proper signal levels over their intended population centers.

The Commission has totally ignored the process of obtaining tower siting for these newly proposed stations, although it is probably the most vital part of the construction of any station.

AUXILIARY BROADCAST

The Commission has ignored the need for additional auxiliary broadcast channels. The Commission hopes that the newly created stations serve their local communities with new voices. They hope that these new stations will broadcast community meetings, local high school sports broadcasts, religious services, etc. The Commission seems to be unaware or is simply ignoring that the presently licensed stations in the FM service already provide these services to their community.

Presently licensed AM and FM broadcasters use a variety of communications methods to provide the above mentioned services. A good percentage of these remote broadcasts utilize RPU channels licensed in the 160 MHz and the 450-455 MHz RPU bands set aside for broadcasting use. In most areas of the country, these RPU channels are heavily used by existing broadcasters, often with 5 or more users sharing time and coordinating usage.

It is reasonable to assume that the newly created Low Power stations will need to utilize the RPU channels to the same degree as existing users. The Commission has made no comments concerning the expansion of the RPU channels to accommodate the increased need and usage by the newly created Low Power stations.

STL CHANNELS

The Commission has ignored the need for additional STL channels. Due to local zoning, it can be reasonably assumed that any new tower construction to accommodate the Low Power stations, will be taking place is zoning districts far away from populated areas. Unless the newly created licensees have considerable construction funds, it is likely that studio and office locations will not be collocated with the tower site. This will require some sort of Studio-To-Transmitter (STL) link between the two, as is done now in the existing broadcast services. Any type of land line service provided by common carriers has become prohibitively expensive. This dictates the need for an RF STL for the link between the studio and transmitter. In most urbanized areas, the RF spectrum allocated for STL usage (950 MHz), is even more congested than the actual FM band spectrum. In most urbanized areas, creative engineering is used, such as terrain shielding, careful directional antenna usage, cross polarization, all to try to stretch the available STL channels to fit all the necessary users in the spectrum. In most urbanized areas, there is no more room in the STL band to fit any others users without causing extreme interference to existing users.

The Commission has made no comments concerning the expansion of the STL band to allow RF spectrum for any more users.

MICRO-RADIO

Micro-radio, defined as 1 to 10 watt stations will mean the death of the FM broadcast service. The Commission also has asked for comments on creating a third class of FM radio called Micro-radio. One only has to look at CB radio in the 70's to see what total chaos could be. This will be anyone doing anything on the band with any equipment and no controls. The Commission makes a broad assumption that micro-radio operators will take the time and spend the money for Commission approved transmitting equipment, and they then will not attempt to make major modifications to the output characteristics in order to expand their services beyond what the Commission intended. Hundreds of internet sites already show cheap and illegal modifications to amateur service equipment available at Radio Shack. The sites show how to modify the easily and cheaply obtainable transmitters to work on the FM band for Pirate Radio. There is no concern for modulation levels, frequency tolerance, frequency stability, or harmonic and spurious emission.

CB Radios were suppose to operate with a fixed output power and modulation level. As the CB radio craze "took off," it became apparent that there was no control on the band, no regard to operating at the required output power, with the required modulation levels, or with any regard to proper operating bandwidth. The Commission only had a few successes in shutting down improperly operating systems, compared to the total number of illegally operating systems. Listening to the CB band today still shows many operators over-modulating and causing out of channel emissions. Unless life is threatened by illegal CB operation, such as interfering with safety radio systems, the Commission has for the most part ignored illegal operation in the Citizen's band.

There will be no incentive for operating at the required technical parameters. The FCC has no staff or budget to control, monitor or enforce any micro-radio service. In its comments, the Commission shows a few examples of how they have shut down some Pirate operators. In central Pennsylvania, it took the Commission over a year to shut down and seize the equipment of a single Pirate Radio operator, known as "Radio Vida" which was operating at a power level 31,000 times the allowed limit, due to the legal steps involved. (See FCC Compliance and Information Action Report No. 99-23 as well as the U.S. Department of Justice-Eastern District Press Release dated May 3, 1999). This operator had already been shut down several years earlier from operating a Pirate Radio station on the AM broadcast band. Other Pirate Radio stations have continued to operate for many years in the Reading and Harrisburg, Pennsylvania areas. The Commission's track record of enforcement of current Pirate Radio operations is dismal, without considering thousands of more stations to monitor.

The FCC will have no control of thousands of stations. How many will even bother to license. Again look at the CB experience. It still is out of control years after the initial craze is over. Mobile and base operators are still operating over powered and over modulated.

UNDERMINING DIVERSITY

The proposal will undermine diversity. Proponents of the Proposed Notice of Rulemaking contend that the addition of LP1000 and LP100 FM broadcast stations will increase diversity of ownership and voices on the airwaves. Since the enactment of the Telecommunications Act of 1996, rapid consolidation of ownership has taken place the middle and larger size markets, thereby reducing the diversity of voices.

However, the addition of the proposed LP1000 and LP100 will in fact cause a further reduction of diversity of ownership reaching into the very small markets due to economic hardship. The LP1000 or LP100 stations will need income to survive, whether it is operating on a commercial basis or through some type of underwriting/fund raising efforts. The Commission acknowledges that most of the new LP1000 and LP100 stations will be created in the smaller markets due to existing congestion of channels allocated to the middle and larger markets in the country. Through the Docket 80-90 experience of increasing the number of stations in any given market, history has shown that the increase of radio stations in a market does not bring a correlating increase in advertising dollars available to the market. History has shown that the existing dollars available in the market are just split up between the increased number of radio stations, each one getting a smaller share than it had before the Docket 80-90 stations were added. When the advertising dollar "pie" is further split into smaller and smaller pieces, through the addition of more radio stations in the smaller markets, the current individual and family owned stations in those markets will be forced to further consolidate ownership in order to survive economically. This will actually cause a decrease in the diversity of ownership than there is at present.

SUMMARY

The Notice of Proposed Rulemaking to create new classes of FM radio services will destroy the integrity of the FM broadcast band and result in the **decrease** of diversity of ownership in this country. The proposal should be dismissed.

Hall Communications, Inc. respectfully submits these comments.

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